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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,940	08/02/2001	Victor Kouznetsov	NATAP009	8370

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EXAMINER

LIN, KELVIN Y

ART UNIT

PAPER NUMBER

2142

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/921,940

Applicant(s)

KOUZNETSOV ET AL.

Examiner

Kelvin Lin

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/11/03</u> . | 6) <input type="checkbox"/> Other: _____  |

## Detailed Action

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 5-11, 15-20 are rejected under 35 USC 102(e) as being anticipated by Bowman-Amuah (U.S. Patent 6615253).
3. Regarding claim 1, Bowman-Amuah teaches a method for facilitating distributed function discovery in a peer-to-peer network, comprising:
  - receiving a broadcast request for a service function from a peer client at a peer server (Bowman-Amuah, col. 34, l.2-4, col. 49, l.16-21);
  - locating information regarding a location remote to the peer server having the requested service function using a stored list of service functions locally stored at the peer server (Bowman-Amuah, col.270, l.44-52); and
  - responding to the peer client with a response containing the

location remote to the peer server if information on the requested service function is located (Bowman-Amuah, col.295, l.38-47) .

4. Regarding claim 5, Bowman-Amuah further discloses a method for facilitating distributed function discovery of claim 1, wherein the response is digitally signed (Bowman-Amuah, col.83, l.4-6).
5. Regarding claim 6, Bowman-Amuah further discloses a method for facilitating distributed function discovery of claim 5, wherein the digitally signed response is signed by a 1024-bit Verisign digital certificate (Bowman-Amuah, col.83, l.6).
6. Regarding claim 7, Bowman-Amuah further discloses a method for facilitating distributed function discovery of claim 1, further comprising:
  - receiving a packet regarding a remotely located designated service function provider (Bowman-Amuah, col.76, l.26-28); and
  - storing information regarding the remotely located designated service function provider (Bowman-Amuah, col.99, l.64-67).
7. Regarding claim 8, Bowman-Amuah further discloses a method for distributed function discovery in a peer-to-peer network, comprising:
  - broadcasting a packet (Bowman-Amuah, col.57, l.11-13);
  - requesting a service function (Bowman-Amuah, Fig. 15, col.56, l.33-37);
  - receiving a response from a responding peer server, the packet containing information regarding a designated provider for the requested service function, the information including location of the

designated provider remote to the responding peer server

(Bowman-Amuah, col.58, l.51-57); and

- accessing the requested service function from the designated service provider at the location specified in the response of the responding peer server (Bowman-Amuah, col.63, l.17-25).

8. Regarding claims 9 and 10 have similar limitations as claims 5 and 6. Therefore, claims 9 and 10 are rejected under Bowman-Amuah for the same reasons set forth in the rejection of claims 5 and 6.

9. Regarding claim 11, Bowman-Amuah further discloses a computer program product for facilitating distributed function discovery in a peer-to-peer network, comprising:

- computer code that receives a broadcast request for a service function from a peer client at a peer server (Bowman-Amuah, col.216, l.31-35);
- computer code that locates information regarding a location remote to the peer server having the requested service function using a stored list of service functions locally stored at the peer server (Bowman-Amuah, col.216, l.54-60);
- computer code that responds to the peer client with a response containing the location remote to the peer server if information on the requested service function is located (Bowman-Amuah, col.218, l.60-63); and

- a computer readable medium that stores said computer codes (Bowman-Amuah, col.309, l.48-67) .

10. Regarding claims 15 and 16 have similar limitations as claims 5 and 6.

Therefore, claims 15 and 16 are rejected under Bowman-Amuah for the same reasons set forth in the rejection of claims 5 and 6.

11. Regarding claim 17, Bowman-Amuah further discloses a computer program product for facilitating distributed function discovery of claim 11, further comprising:

- computer code that receives a packet regarding a remotely located designated service function provider (Bowman-Amuah, col.271, l.1-5); and
- computer code that stores information regarding the remotely located designated service function provider (Bowman-Amuah, col.273, l.1-21).

12. Regarding claim 18 has similar limitations as claim 11. Therefore, claim 18 rejected under Bowman-Amuah for the same reasons set forth in the rejection of claim 11.

13. Regarding claims 19 and 20 have similar limitations as claims 5 and 6.

Therefore, claims 19 and 20 are rejected under Bowman-Amuah for the same reasons set forth in the rejection of claims 5 and 6.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 2-4, and 12-14 are rejected under 35 U.S.C 103(a) as being unpatentable over Bowman-Amuah in view of Kouznetsov (US Patent 6782527).

15. Regarding claims 2, Bowman-Amuah differs from the claimed invention in that it does not explicitly indicate the randomly generated delay, instead of stating "... must be configured the listener to accommodate for any delay on receipt of the client response" (Bowman-Amuah, col. 261, l.30-32).

Kouznetsov teaches the random time delay generator executing in the first and second network-coupled computing appliances (Kouznetsov, col. 12, l.53-56).

With the same client/server peer-to-peer distributed network environment, Bowman-Amuah's time delay scheme can adopt any flexible technology.

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Kouznetsov's randomly time delay scheme with Bowman-Amuah's response period. And improves the utilization of the bandwidth and resources efficiently.

16. Regarding claim 3, Bowman-Amuah differs from the claimed invention in that it does not explicitly indicate when the responding is performed, instead, it states "... queuing delay may be accommodated for a response from the clients" (Bowman-Amuah, col. 260, l.5-6). As mentioned at statement 15,

Kouznetsov teaches the random time delay generator. Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Kouznetsov's randomly time delay scheme with Bowman-Amuah's response period after the non-receipt of the response packet at expiry of the delay response period.

17. Regarding claim 4, Bowman-Amuah differs from the claimed invention in that it fails to indicate that the cancellation of responding upon the receipt of the broadcast response packet during the randomly generated delay response period, instead, it states " ... If the period configured for a client to respond expires then the context is deleted" (Bowman-Amuah, col. 261, l.22-24). However, Kouznetsov teaches " this delay (i.e. randomly generated delay) allows the responses from multiple agents to be dispersed through time. Once a requesting agent 202 has received the update, it too can participate in responding to subsequent distribution requests. In this manner, an update is propagated quickly through a subnet." – that means "an update" may include the cancellation of a response (Kouznetsov , col. 8, l.59-62). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Kouznetsov's cancellation response scheme with Bowman-Amuah's response period.
18. Regarding claims 12-14 have similar limitations as claims 2-4. Therefore, claims 12-14 are rejected under Bowman-Amuah in view of Kouznetsov for the same reasons set forth in the rejection of claims 2-4.



### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to application's disclosure.

- Kitain et al., (Patent No. 5864871) Information delivery system and method including on-line entitlements
- Levy et al., (Patent No. 6212633) Secure Data Communication over a Memory-mapped Serial Communication Interface Utilizing a Distributed Firewall.
- Bowman-Amuah K. (Patent No. 6697824) Relationship Management in an E-Commerce Application Framework.
- IEEE – Kovalerchuck et al., Comparison of Relational Methods and Attribute-based Methods for Data Mining in Intelligent Systems, Proceedings of the 1999 IEEE, Sep. 1999, pp. 162-166.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kelvin Lin whose telephone number is 703-605-1726. The examiner can normally be reached on Flexible 4/9/5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Harvey can be reached on 703-305-9705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KYL  
10/15/04

  
JACK D. HARVEY  
SUPERVISORY PATENT EXAMINER